Water Quality Testing for Turf Managers

In North Carolina, common water quality issues for turf management are high alkalinity, pH, sodium, chloride and iron. Irrigation water can be tested for mineral levels, alkalinity and salinity indicators through NCDA&CS Agronomic Services—Solutions Lab.

When: Irrigation water should be tested 1) annually at ~ the same time each year and 2) whenever a suspected fertility problem arises.

How to collect an irrigation water sample: Collect water in a clean plastic container such as a 16 oz soda or water bottle.

- Do not clean the sample bottle with detergents.
- Before sampling, run water 5 to 10 minutes and then collect water from the tap or emitter.
- Label each sample with a sample ID and fill out the **Solution** sample information form. List the appropriate irrigation water code.

Irrigation Water	
IW	General
IO	Overhead
IT	Trickle

- Specify if the sample is Predictive (routine) or Diagnostic (troubleshooting).

SAMPLE TYPE
[circle one / see instructions]

Predictive ($5)	Diagnostic ($5)
Research ($12)	Out of State ($25)

- List any corresponding soil or nematode samples.

Standard analysis is $5 per N.C. grower sample ($12 for N.C. researchers; $25 for samples originating out-of-state) and includes nitrate-nitrogen, ammonium-nitrogen, urea, phosphorus, potassium, calcium, magnesium, sulfur, iron, zinc, manganese, copper, boron, sodium, chloride, pH and electrical conductivity/soluble salts, alkalinity, hardness and sodium adsorption ratio.

Turnaround time: 3-4 days from receipt

Send samples to:

NCDA&CS Agronomic Services—Solutions Section

Mailing address (USPS):
1040 Mail Service Center, Raleigh, NC 27699

Physical address (UPS, FedEx):
4300 Reedy Creek Rd, Raleigh NC 27607
Phone: (919) 733-2655

For more detailed information, visit the Solution Analysis page at www.ncagr.gov /agronomi or contact the regional agronomist or extension agent for your county.